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Data Structures

**ArrayList:**

Class/Interface/Abstract Class? Class

Search Time: O(n)

Insertion Time: O(1)

Deletion Time: O(1)

Brief Description: This is essentially an array where it is easy to change the size, add elements, and delete elements. It is a collection of objects, the type of which is specified in the brackets <>.

**Set:**

Class/Interface/Abstract Class? Interface

Search Time: O(n)

Insertion Time: O(n)

Deletion Time: O(n)

Brief Description: A set is a collection of objects such that there is no object in the set that is the same as another object in the same set.

**TreeSet:**

Class/Interface/Abstract Class? Class

Search Time: O(log(n))

Insertion Time: O(log(n))

Deletion Time: O(log(n))

Brief Description: This is a data structure in which objects are stored in a sorted order. It uses a tree for storage, hence the name TreeSet.